TOXICS USE REDUCTION INSTITUTE
University of Massachusetts Lowell
600 Suffolk Street
Wannalancit Mills, MA 01854
(978) 934-3275 fax: (978) 934-3050
www.turi.org

Docket IDs:
EPA-HQ-OPPT-2016-0723 (1,4-Dioxane)
EPA-HQ-OPPT-2016-0725 (Pigment Violet 29)
EPA-HQ-OPPT-2016-0732 (Tetrachloroethylene)
EPA-HQ-OPPT-2016-0733 (Carbon Tetrachloride)
EPA-HQ-OPPT-2016-0735 (HBCD)
EPA-HQ-OPPT-2016-0736 (Asbestos)
EPAHQ-OPPT-2016-0737 (Trichloroethylene)
EPA-HQ-OPPT-2016-0741 (1-Bromopropane)
EPAHQ-OPPT-2016-0742 (Methylene Chloride)
EPA-HQ-OPPT-2016-0743 (NMP)

September 19, 2017

We are pleased to offer comments on EPA's scope of the risk evaluation for the first ten chemicals chosen for evaluation under the Lautenberg Act. Our comments are based on our experience working with Massachusetts businesses, researchers and community organizations to reduce the use of toxic chemicals.

Background: The Massachusetts Toxics Use Reduction Act

The Toxics Use Reduction Act (TURA) requires large-quantity chemical users to report annually on their use of toxic chemicals, pay an annual fee, and conduct toxics use reduction planning every two years. The program is implemented collaboratively by the Massachusetts Department of Environmental Protection, the Massachusetts Office of Technical Assistance and Technology, and the Massachusetts Toxics Use Reduction Institute (the Institute). Together, the three agencies provide a range of services to help companies reduce their use of toxic chemicals. The Institute, located at the University of Massachusetts Lowell, provides grants, research, cleaning laboratory services, education and training, technical support, and policy analysis, among other services and activities.

Eight of the chemicals chosen for risk evaluation are listed under TURA. In addition, trichloroethylene (TCE), tetrachloroethylene (perc), 1-bromopropane (n-propyl bromide, or nPB) and methylene chloride have been designated as Higher Hazard Substances under TURA, lowering the volume threshold for reporting, planning and fee requirements. For these chemicals, facilities in TURA covered sectors with 10 or more full time employee equivalents are subject to TURA requirements if they use 1,000 lb/year of the chemical in question. 1,4-dioxane, carbon

tetrachloride, asbestos and NMP have a reporting threshold of 25,000 lb/year for manufacturing and processing activities, and 10,000 lb/year for businesses otherwise using the chemicals. HBCD will be reportable under TURA beginning in reporting year 2018. Pigment violet 29 is not currently listed under TURA.

Of the ten chemicals chosen by EPA for risk evaluation, the Institute has direct experience helping businesses and/or communities to reduce six of the chemicals. For four of the chemicals (1,4 dioxane, pigment violet 29, HBCD and asbestos), the Institute does not have substantial direct project experience.

The need to consider all uses

Based on the Institute's experience, many of the chemicals EPA has chosen for risk evaluation are found widely in industry, in products and in the ambient environment. For example, some of the solvents included on the list can be used in both commercial and home degreasing applications, in addition to being used as intermediates in manufacturing processes. Many are widespread contaminants in soil or water. Both legacy uses and current use can be important contributors to this contamination. For these reasons, it is important to consider the full range of uses in evaluating the over-all impact of the chemical on human health and the environment. EPA's consideration of the full range of uses and exposures, including those that are unintended, provides valuable information for states, businesses, and others who are working with companies and consumers.

In its work on the solvents included on this list, the Institute has noted that some relatively small-volume uses can be associated with large exposures. For example, consumer use of aerosol sprays can lead to important exposures.

Importance of worker exposures

For many of these chemicals, workers are likely to experience particularly large exposures. For example, the Institute has worked with many small businesses that use solvents in dry cleaning or in small vapor degreasing operations. Institute staff members have observed that these small businesses do not necessarily use the solvents in the way in which they were intended, and do not use the personal protective equipment (PPE) that is recommended.

It is also clear that many workers have very direct, extensive and prolonged exposure to the solvents they work with. These same individuals, of course, may also be exposed through drinking water, through home activities using the same chemicals or other chemicals with similar pathways of action, or through other sources of ambient environmental exposure. All of these exposures in combination can have adverse effects on human health. The Institute has helped many companies identify safer and effective water-based and solvent alternatives.

The Institute also has direct experience with addressing exposures of pregnant women to chemicals included on EPA's list. One example comes from the Institute's work to help dry cleaners shift to dedicated wet cleaning, a safer alternative to the use of perc, nPB or other solvents in garment cleaning. In more than one case, a cleaner chose to work with the Institute to eliminate perc due to a pregnancy among the workers and concern about fetal exposures. Of

course, many other occupationally exposed families may be unaware of the hazards of perc and other solvents.

Susceptible subpopulations

As EPA has noted, exposure to the chemicals on this list can have particularly severe effects on individuals who experience high exposures or who are exposed at a particularly vulnerable life stage. In EPA's scoping document for tetrachloroethylene, for example, concern about fetal and infant exposures is noted. Based on the information that EPA has collected, as well as similar information reviewed by the Institute in the course of its work on this and other chemicals, it would be important to consider the unique vulnerability of the developing fetus and infant in the full risk evaluation.

Information available through TURA

Under TURA, facilities that meet the reporting and planning criteria provide detailed information on their use of listed chemicals each year. The Institute has provided some information from the TURA data to EPA, and is happy to provide additional information as needed. The Institute believes that chemical use data such as that available through TURA, chemical release data available through TRI, chemical storage data available through Tier II reporting, and other similar data reported by facilities will be valuable inputs for a risk evaluation process. The philosophy of the TURA program is that reducing or eliminating the use or release of toxic chemicals is an effective and efficient way to protect human health and the environment.

Summary

Based on its experience working with Massachusetts businesses and communities to reduce the use of many of the chemicals included on EPA's list, the Institute believes there are important hazards that can be addressed by EPA. By conducting a thorough assessment of the full range of uses, and fully considering the range of susceptible subpopulations, EPA has the opportunity to make an important contribution to the on-going effort to protect human health and the environment, supporting the efforts of businesses, states, and others.